

METHOD FOR THE SECURE AND TIMELY DELIVERY OF LARGE MESSAGES OVER A DISTRIBUTED COMMUNICATION NETWORK

ABSTRACT OF THE DISCLOSURE

A method for transferring messages between a sending application program and a receiving application program across a distributed communication network (e.g., the Internet) that includes a message source coupled to a message destination. The method includes segmenting a message (e.g., a relatively large message of one gigabyte or more) being received at the message source from the sending application program into a plurality of message segments. While this segmentation is occurring, a common message identifier and a unique sequence number are assigned to each of the plurality of message segments. The method also includes transferring the plurality of message segments from the message source to the message destination, along with the common message identifier and unique sequence number assigned to the plurality of message segments, with at least one of the plurality of message segments being transferred as the message is being received at the message source. In other words, prior to the entire message being received at the message source and segmented, message segments that have already been segmented from the message are transferred (i.e., sent) to the message destination. At the message destination, the plurality of message segments that have been transferred from the message source are assembled into a reassembled message as the plurality of message segments are received at the message destination. At least a portion of the reassembled message is delivered to the receiving application while the assembling is occurring.